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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/032,218

12/21/2001

Carlton J. Sparrell

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08/16/2007

GENERAL INSTRUMENT CORPORATION DBA THE CONNECTED  
HOME SOLUTIONS BUSINESS OF MOTOROLA, INC:  
101 TOURNAMENT DRIVE  
HORSHAM, PA 19044

EXAMINER

DANG, HUNG Q

ART UNIT

PAPER NUMBER

2621

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DELIVERY MODE

08/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/032,218		SPARRELL ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Hung Q. Dang		2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/17/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 08/02/2007 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4, 6-12, 14-17, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US Patent 7,123,813) and Takagi et al. (US Patent 5,999,691).**

Regarding claim 1, Inoue discloses a digital video recording and playback method adapted for "live-pause" recording and playback (column 2, lines 7-11), said method comprising: receiving a first program (column 2, lines 25-30); receiving a program guide (column 4, lines 5-20) comprising program length information about the first program (specified by "broadcast time" in column 5, lines 1-7 and "broadcast end time" in column 6, lines 25-30); converting buffer memory size into a corresponding program length information, which is equivalent to converting said program length information into a corresponding buffer memory size (column 7, lines 16-24); establishing a buffer memory matching the buffer memory size determined in the converting step (column 8, lines 15-34; Fig. 4; column 8, line 65 – column 9, line 22);

recording the first program in the buffer memory established in the establishing step, wherein said buffer memory size matches the size needed to recording the first program (column 6, lines 47-48); and playing back a portion of the recorded first program during a “live-pause” operation (column 2, lines 8-12). Further Inoue also discloses a feature of live-pause operation that is to allow playing back of the program data when the program data are recorded (column 2, lines 8-12).

However, Inoue does not explicitly disclose the playing back occurs simultaneously with the recording.

Takagi et al. disclose playing back of program data occurs simultaneously with the recording of the program data (column 9, line 40 – column 10, line 10).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the feature that allows playing back simultaneously with recording as disclosed by Takagi et al. into the recording and playback method disclosed by Inoue. The incorporated feature would allow viewers to pause a live program when necessary for doing something else which is more urgent at the time. This feature would enhance the user interface of the method.

Regarding claim 2, Inoue also discloses said program length information comprises the scheduled end time of the first program (column 6, lines 25-30).

Regarding claim 3, Inoue also discloses said program length information comprises the scheduled start time of the first program (column 5, lines 1-7).

Regarding claim 4, Inoue also discloses at the direction of a user, designating the first program stored in said buffer memory for long-term storage under the view that the

hard disk in the hard disk drive (HDD) () can be used as buffer memory and long-term memory (column 3, lines 23-30).

Regarding claim 6, Inoue also discloses releasing said established buffer memory from recording the first program, and making its memory space available to part of another buffer memory if needed at any time including after the first program has been recorded (column 2, lines 8-12).

Regarding claim 7, Inoue also discloses releasing said established buffer memory from recording the first program, and making its memory space available to part of another buffer memory if needed at any time including when a user tunes in to another program (column 2, lines 8-12).

Regarding claim 8, Inoue also discloses releasing said established buffer memory from recording the first program, and making its memory space available to part of another buffer memory if needed at any time including when a user directs that recording be halted (column 2, lines 8-12).

Claim 9 is rejected for the same reason as discussed in claim 1 above in further consideration of Inoue also disclosing a tuner unit to receive a first program (Fig. 2).

Claim 10 is rejected for the same reason as discussed in claim 2 above.

Claim 11 is rejected for the same reason as discussed in claim 3 above.

Claim 12 is rejected for the same reason as discussed in claim 4 above.

Claim 14 is rejected for the same reason as discussed in claim 6 above.

Claim 15 is rejected for the same reason as discussed in claim 7 above.

Claim 16 is rejected for the same reason as discussed in claim 8 above.

Regarding claim 17, Inoue discloses a digital video recording and playback method adapted for "live-pause" recording and playback (column 2, lines 7-11), said method comprising: receiving a first program (column 2, lines 25-30); adaptively establishing a buffer memory having a size adequate to record the first program (column 7, lines 16-24; column 8, lines 15-34; Fig. 4; column 8, line 65 – column 9, line 22); recording the first program in the buffer memory established in establishing step (column 6, lines 47-48); and playing back a portion of the recorded first program during a "live-pause" operation (column 2, lines 8-12). Further Inoue also discloses a feature of live-pause operation that is to allow playing back of the program data when the program data are recorded (column 2, lines 8-12).

However, Inoue does not explicitly disclose the playing back occurs simultaneously with the recording.

Takagi et al. disclose playing back of program data occurs simultaneously with the recording of the program data (column 9, line 40 – column 10, line 10).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the feature that allows playing back simultaneously with recording as disclosed by Takagi et al. into the recording and playback method disclosed by Inoue. The incorporated feature would allow viewers to pause a live program when necessary for doing something else which is more urgent at the time. This feature would enhance the user interface of the method.

Claim 19 is rejected for the same reason as discussed in claim 4 above.

Claim 20 is rejected for the same reason as discussed in claim 6 above.

Claim 21 is rejected for the same reason as discussed in claim 7 above.

Claim 22 is rejected for the same reason as discussed in claim 8 above.

**Claims 5, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US Patent 7,123,813) and Takagi et al. (US Patent 5,999,691) as applied to claims 1-4, 6-12, 14-17, and 19-22 above, and further in view of Young (US Patent 5,991,498).**

Regarding claim 5, see the teachings of Inoue and Takagi et al. as discussed in claim 1 above. Furthermore, Inoue also discloses one of the buffers used can be tapes in VCR devices (Fig. 1; column 3, lines 23-30). However, the proposed combination of Inoue and Takagi et al. does not disclose if the first program is of indefinite length, said program length information comprises as a default, a fixed length.

Young discloses a method for recording, comprising a step of, if program is of indefinite length, said program length information comprises as a default, a fixed length, which is the length of the tape (column 10, lines 14-16).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the step of assigning a default, a fixed length as disclosed by Young into the method disclosed by Inoue and Takagi et al. to automatically set up a limitation of recording time for those programs that do not have a specified length. The incorporated feature would enhance the user interface of the method because it provides an automatic mechanism to handle the programs with indefinite length without user's intervention.

Claim 13 is rejected for the same reason as discussed in claim 5 above.

Regarding claim 18, see the teachings of Inoue as discussed in claim 17 above. However, the proposed combination of Inoue and Takagi et al. does not disclose the size of said buffer memory is set to one of a plurality of fixed sizes to match an estimated size of the first program.

Young discloses the duration of recording (which corresponds to a size of the buffer memory) is set to one of a plurality of fixed periods (which corresponds to one of plurality of fixed sizes of memory) to match an estimated length of the first program (which corresponds to an estimated size of the program) (column 8, lines 10-55; Fig. 4).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the memory-size (or time length) estimating step disclosed by Young into the method disclosed by Inoue and Takagi et al. to round up the time length or memory size to conventional broadcast start time and end time (which is usually presented in units of 15 minutes). Such doing would save hardware resources because storage of unnecessary extra bits is not needed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



Art Unit: 2621

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is 571-270-1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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